

U.S. Patent Appln. S.N. 10/535,244
AMENDMENT

PATENT

IN THE CLAIMS:

Please cancel claims 2 and 4-6, rewrite claims 1, 3 and 7-9, and add new claims 10 and 11, as shown below in the detailed listing of all claims which are, or were, in the application:

1. (Currently amended) A contact device for improving the conductance of an electrical connection consisting of two connectors in contact with one another comprising a conductive insert placed between the two contact surfaces of the two conductors of said connection, said conductive insert comprising an electrically conductive foam made of one or more materials, with high deformability and porosity in order to reduce the resistance of the connection,

wherein said electrically conductive foam comprises silver foam, and

wherein said electrical connection is adapted to conduct current greater than 1,000 A.

2. (Canceled)

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3. (Currently amended) The device according to claim 1, in which said conductive insert comprising an electrically conductive foam includes at least a peripheral seal creating a hermetic barrier against external damaging agents along the ~~a~~ periphery of said conductive insert.

Claims 4-6 (Canceled)

7. (Currently amended) The device according to claim 1 in which said conductive insert is placed between said conductors whose contact surfaces are degraded.

8. (Currently amended) The device according to ~~claim 7~~ claim 3, in which said peripheral seal is made by depositing an elastomer sealing product along the periphery of said conductive insert.

9. (Currently amended) The device according to ~~claim 7~~ claim 3, in which said peripheral seal is made by at least a fold on the an edge of said conductive insert.

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10. (New) An electrical connection comprising two connectors, each having a contact surface, a contact device comprising a conductive insert placed between and in contact with the contact surfaces of the two conductors, said conductive insert comprising an electrically conductive foam with high deformability and porosity,

wherein said electrically conductive foam comprises silver foam, and

wherein said electrical connection is adapted to conduct an electrical current greater than 1,000 A.

11. (New) A process for improving the electrical conductance of an electrical connection, comprising

placing a conductive insert comprising an electrically conductive silver foam between two conductors, each having a contact surface, such that said conductive insert is in contact with both contact surfaces; and

conducting an electrical current greater than 1000A through said electrical connection.